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[Reprinted from THE MEDICAL NEWS, December 3, 1892.]

A LARGE AORTIC ANEURISM.

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THE case that I herewith report was under my care several times during the past four years. The aneurism is one of the largest, if not the largest, on record in the Medical Museum, at Washington.

The pathology of thoracic aneurism has received most careful consideration. The subject is of special importance to the clinician, who often finds it difficult to locate the exact portion of the thoracic aorta from which the aneurism springs. As a rule, aneurisms of the aorta are confined to the ascending portion and to the arch.

Sometimes the carotid, the innominate, and the subclavian arteries may be severally involved. It is not my purpose to write an exhaustive article upon the etiology, pathology, and treatment of aneurism of the aorta, but it is well to remember that aneurisms are divided into (1) true aneurisms, in which all three coats of the vessel are involved; (2) false aneurisms, in which only the inner coats are destroyed; (3) diffuse aneurisms, in which the three coats give way and the walls of the blood-sac are made up of the surrounding structures. The causes of aneurism are various, viz., chronic inflammation of the arterial walls, fatty degeneration, atrophy, and violent exertion. Among the diseases that

lead to its development may be mentioned rheumatism and syphilis.

The disease is one of middle age, and males are more often affected than females, because of the exposure to which they are subjected, and the violent exertion in which they engage. The diagnosis is often very obscure, by reason of the lack of uniformity of the symptoms and also from the anatomy of the parts. Sometimes there is severe pain in the cardiac region, swelling and throbbing of the vessels, fulness and weight in the chest, in addition to marked dyspnea. The position and growth of the aneurismal sac often modify the chest-symptoms.

In the case to which I desire to call attention, a correct diagnosis was made when the patient first came under my care some four years ago, when the aneurismal sac was not prominent and many of the symptoms and physical signs were negative.

The man was first admitted to the Freedmen's Hospital October 24, 1888, and was discharged January 15, 1889. Several times during the past four years he has received treatment for the severe pain in the chest and shortness of breath. He was last admitted to the hospital on August 15, 1892. He died October 1, 1892. The tumor had grown much larger and his condition was very critical. I learned that the man left Algiers in 1861, enlisted as a sailor and had followed the water for more than thirty years. His weight was 225 pounds, height 5 feet 10 inches; he had been married fourteen years, and had five living children. He stated that his age was seventy-eight, and that he was born in Algiers; he also stated that his health was always good until after lifting heavy loads on shipboard. One day he felt a sharp pain over the heart, after which he had asthmatic attacks. The tumor that presented measured eight inches vertically, nine inches transversely, and eleven inches obliquely. When last admitted the man was suffering from marked and persistent asthmatic

attacks which responded to the usual treatment, viz., Hoffman's anodyne and morphine. His general health was good and he was remarkably well nourished for a person who had been seriously ill for four years. He was large and muscular, a man of great strength, a fact well demonstrated when we tried to control him during one of the severe paroxysmal attacks that periodically recurred. His physical condition was so good that even the intense suffering during the many months of his former illness had made but slight impression on his general health. His mind seemed slightly affected, and yet by reason of his foreign accent and some other peculiarities common to people of his country, I was often at a loss to know how much of his private history to believe. Several times he impressed me that there must be some cerebral irritation not due to reflex influence of the heart-disease. When questioned about his parents, he informed me that his father had died ten years previously; that he was the twenty-fifth child; that his mother was one hundred and fifty years old, and was now living. While at the hospital, a year or so ago, he would become very violent, would scream and run around the ward; and often he would boast of his cannibalistic feats in years past, when American citizens appeased his appetite in the wilds of his native home.

During his stay at the hospital the last time he was under my especial care. In the paroxysms from which he suffered his pain was intense. The last month of his life was made as comfortable as possible by the judicious use of Hoffman's anodyne and potassium bromide during the day and morphine at night.

Even under the influence of these drugs he was unable to rest in bed, and spent most of his time sitting in a chair and leaning over a pillow on the back of another chair, thus relieving the lungs of the pressure of the aneurism.

Dyspnea, however, became more pronounced, and progressed in intensity until death ensued.

The post-mortem examination was made by Prof. D. S. Lamb, of the Army Medical Museum. I am indebted to Mr. J. A. Robinson, Jr., for the report of the examination.

An incision in the middle line below the ensiform appendix disclosed an edematous condition of the tissue, as well as certain hard abnormal tissues extending from the site of the aneurismal sac to near the region of the axillary space.

The lungs were generally adherent.

Several ribs were found to be eroded in consequence of the long-continued pressure by the sac.

The liver was bound by old adhesions. The organ was small; its vessels were congested and their walls considerably thickened.

The left lung was found to be a little edematous. The upper portion was divided into three small lobes. Some of the bronchi were filled with yellowish pus.

The heart was enlarged. There was considerable thickening of the pericardium from an old pericarditis.

The aorta was greatly dilated and contained a large quantity of soft blood-clot.

The aneurismal pouch began just above the aortic valve and involved the ascending and transverse portions of the arch of the aorta. The sac contained a mass of laminated or striated blood-clot.

The capsule of the spleen was thickened and adherent to the diaphragm. The organ appeared to be enlarged and was very dark.

The left kidney had a small cyst in its cortical substance, and on being opened, another small cyst was found within it.

The right kidney was normal.

The carotid arteries and innominate veins were patulous and not interfered with.

The sac detached and lifted out was a foot in diameter.

A large part of the sternum and several ribs on either side were entirely absorbed.

The growth of the pouch being forward, there was no pressure on the spine, which appeared normal.

The calvarium and the cerebrum presented no abnormality.

The cerebellum was anemic; its appearance was suggestive of some interference with its nutrition during life. This view was strengthened by a decided softening and breaking-down of the inferior portion of both lobes of the cerebellum. This fact furnished an explanation of the impairment of coördination that existed some weeks before death. No cause for the softening was found; this was supposed to have been due to some interference with the circulation through the branches of the basilar and vertebral arteries.

The immediate cause of death was suffocation from the pressure of an aneurism of the arch of the aorta upon the trachea.